

## **ABSTRACT**

**TITLE:** Skin staples: An alternative for polypropylene sutures for mesh fixation in  
Lichtenstein's tension free repair of inguinal hernia.

**DEPARTMENT:** General Surgery

**NAME OF THE CANDIDATE:** Swaminathan Ravi

**DEGREE AND SUBJECT:** M.S. General Surgery

**NAME OF THE GUIDE:** Dr.Suchita Chase

### **OBJECTIVES:**

To study the use of skin staples in place of polypropylene sutures for mesh fixation and wound closure in patients undergoing elective inguinal hernia repair.

**METHODS:**A single arm study was designed to observe the effects of skin staples for mesh fixation and wound closure in 50 consecutive cases of primary unilateral adult inguinal hernia open mesh repair from 1st November 2015 to 31st July 2017. The mesh fixation time was noted and the incidence of post-operative complications was calculated. The data was compared with 100 retrospective controls who had undergone Lichtenstein's hernioplasty with polypropylene sutures for mesh fixation.

### **RESULTS:**

The mean mesh fixation time was noted to be 15.04 minutes with a range of 8:30 minutes to 30:00 minutes. There was no significant difference 22.45% vs. 22% ( $p=0.951$ ) between the

development of seromas or haematomas between the study group and controls. As of September 2017, 3 out of 50 patients (6%) developed a recurrence with the last patient recruited in August 2017.

10.2% of patients developed a superficial surgical site infection which was treated conservatively.

. Incidence of post-operative complications were comparable with the standard procedures. However, there was higher short term recurrence rate as compared to standard procedure.